

Title (en)

Synchronising device with synchroniser ring having an external conical surface for speed-changing transmission

Title (de)

Gleichlaufvorrichtung mit einem Aussenkonus-Synchronring für ein schaltbares Getriebe

Title (fr)

Dispositif de synchronisation avec bague de synchronisation comportant une surface extérieure conique pour boîte de vitesses

Publication

**EP 0933547 A3 20000322 (DE)**

Application

**EP 98121112 A 19981109**

Priority

DE 19755613 A 19971215

Abstract (en)

[origin: DE19755613A1] The gearbox has an outer cone synchromesh (20) with a predetermined number of lobes (22). The lobe inner surfaces are coaxial parallel to the synchromesh ring longitudinal axis (30). The synchromesh springs (28) are retained on the selector wheel (12) by a mechanical arrangement (46). The synchromesh ring is moved by an arrangement (34) which retains it on a sliding bush (16).

IPC 1-7

**F16D 23/06**

IPC 8 full level

**F16D 23/06** (2006.01)

CPC (source: EP)

**F16D 23/06** (2013.01)

Citation (search report)

- [A] US 2470208 A 19490517 - AVILA FRANK W
- [A] GB 482077 A 19380323 - ROVER CO LTD, et al
- [A] EP 0272134 A2 19880622 - TOYOTA MOTOR CO LTD [JP]
- [A] FR 1225661 A 19600704 - RENAULT
- [A] US 5479835 A 19960102 - ESPARSA RODOLFO [MX], et al

Cited by

US9777779B2; US8567582B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**DE 19755613 A1 19990617**; DE 59808059 D1 20030528; EP 0933547 A2 19990804; EP 0933547 A3 20000322; EP 0933547 B1 20030423

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**DE 19755613 A 19971215**; DE 59808059 T 19981109; EP 98121112 A 19981109